# CIRM Scientific and Medical Research Funding Working Group Biographical information of candidates nominated to serve as Scientific Members of the Working Group

#### Brenda Andrews, PhD

Dr. Andrews is Professor and Chair of the Banting & Best Department of Medical Research within the Faculty of Medicine at the University of Toronto, where she holds the Charles H Best Chair in Medical Research. She is also Director of the Terrence Donnelly Center for Cellular and Biomolecular Research (the Donnelly Centre), an interdisciplinary biomedical research institute with a focus on technology development for post-genome biology, functional genomics, systems & computational biology and bioengineering. She received her PhD in Medical Biophysics from the University of Toronto and obtained her early training in genetics with the late Dr. Ira Herskowitz at the University of California San Francisco. In 1991, Dr. Andrews was recruited to the Department of Medical Genetics (now Molecular Genetics) at the University of Toronto. She became Chair of the Department in 1999, a position she held for 5 years before assuming her current positions.

Dr. Andrews' current research interests include mechanisms of cell cycle control and the regulation of cell cycle-dependent transcription, kinase specificity and function, and regulation of cell polarity and morphogenesis. Although the Andrews lab is particularly interested in these biological processes, most of the lab's current effort is devoted towards a broader functional genomics program, based on an automated genetics platform developed in collaboration with the Boone laboratory. The Andrews/Boone groups established a unique array-based method for mapping genetic interaction networks in budding yeast called Synthetic Genetic Array or SGA analysis. The ultimate goal of the SGA project is to generate a comprehensive genetic interaction network for a model eukaryotic cell. The unique automated yeast genetics platform in the Andrews lab has been expanded to include gene overexpression effects and sensitive cell biological readouts (phenomics). Current large scale projects include genome-wide Synthetic Dosage Lethal screens to discover targets for conserved protein kinases and other enzymes, systematic assays of tagged reporter genes to delineate transcriptional regulatory pathways and the use of automated imaging to systematically assess the effects of genetic and environmental perturbation on a variety of sub-cellular compartments.

Dr. Andrews' research is funded by the Canadian Institutes for Health Research (CIHR), the National Institutes of Health, the Ontario Research Fund, the Canadian Foundation for Innovation and the Canadian Institute for Advanced Research (CIFAR). She is a Fellow of the Royal Society of Canada, Fellow of the American Association for the Advancement of Science, a Fellow of the American Academy of Microbiology and Director of the Genetic Networks Program of CIFAR. She currently serves on several Advisory Boards including: the Scientific Advisory Board for the March of Dimes; the External Advisory Committee for New York University in Abu Dhabi; the External Advisory Committee for the Lewis-Sigler Institute at Princeton

University; the Board of Directors of the Genetics Society of America (GSA). She is also founding Editor-in-Chief of Genes:Genomes:Genetics (G3), an open access journal of the GSA and has served on many grant panels in Canada, the United States (most recently Chair of the ENCODE RFA review panel for the NHGRI) and Europe.

### John M. Centanni, MS

John Centanni is a regulatory affairs scientist in the Department of Medicine at the University of Wisconsin - Madison where he is also Adjunct Professor. He is also Director of IND/IDE Consulting Services in the UW Department of Medicine and the Institute for Clinical and Translational Research (ICTR). Mr. Centanni holds a MS degree in Biotechnology. He provides regulatory support to clinical study investigators that are developing novel cellular technologies from bench to bedside. Recent efforts include regulatory and scientific input on technology transfer, early clinical product development, and FDA communications as it relates to the design and execution of preclinical and clinical studies. Additional key areas of support include the development and evaluation of in vivo cell delivery methods, dosing regimen, cell tracking, safety, and cell distribution profiles to support various phases of human clinical studies. Mr. Centanni has worked within the pharmaceutical and biotechnology industry since 1989 and has over 20 years of product development experience with a focus on biologics. He has instructed and trained basic R&D scientists and clinical researchers in regulatory compliance and expectations associated with clinical product development (GLP, GMP, GTP, and GCP). He is experienced in preclinical research, regulatory, quality assurance, clinical development, project management, and has been involved in the development and registration of pharmaceutical products across a number of therapeutic categories.

As a cellular and molecular biologist, Mr. Centanni has demonstrated success as a Principal Investigator on a number of NIH sponsored SBIR/STTR Fast-Track grant awards. His research interests have focused on development of new therapies to enhance wound healing and expedite wound closure of acute or chronic skin wounds. Mr. Centanni has generated several animal models of human disease using state-of-the-art genetic engineering techniques. He has created a number of novel transgenic disease models in a variety of different animal species. His thesis and defense research included the isolation and genetic manipulation of ES cells that were used to produce a novel animal model of a human disease.

#### Robert Marcus, MD

Dr. Marcus joined the US Affiliate of Eli Lilly & Company in 2001 to support Lilly's program in Osteoporosis and Skeletal Medicine. From 2003 to his retirement from Lilly in 2008, Dr. Marcus was the lead physician for the Forteo team at Lilly. Dr. Marcus is Professor-Emeritus, Stanford University, where he served on the full-time medical faculty for almost 25 years, before joining the Emeritus faculty in 2001. At Stanford, he was located at the Veterans Affairs Medical Center, Palo Alto California, where he served as Director of the Aging Study Unit of the Geriatrics Research, Education, & Clinical Center from 1982-2001.

Dr. Marcus enjoyed a long career as a clinical investigator in the fields of Bone & Mineral Metabolism and Osteoporosis Medicine. His own research interests included diagnosis and therapy of primary hyperpara-thyroidism, interactions of the parathyroid-vitamin D axis with estrogen, age-related changes in the growth hormone-IGF axis, effects of growth hormone replacement for older men and women, metabolic and musculoskeletal effects of resistance exercise in older men and women, adolescent bone acquisition, and osteoporosis therapeutics. Dr. Marcus' laboratory was a study site for many of the pivotal clinical trials in the osteoporosis field. These include the NIH Post-menopausal Estrogen/Progestin Interventions Trial (PEPI), Merck's Fracture Intervention Trial (FIT), Lilly's Multiple Outcomes of Raloxifene Intervention (MORE), and Lilly's registration trial of recombinant PTH(1-34) in the treatment of postmenopausal women with osteoporosis.

Dr. Marcus has published more than 150 research papers, editorials, and reviews, and is the Chief Editor of the Award-Winning research text,"OSTEOPOROSIS," published by Elsevier and currently in its Fourth edition. Dr. Marcus served as President of the American Society for Bone & Mineral Research in 2000-2001.

#### Hassan Movahhed, MS

Hassan Movahhed is the Senior Vice President and Head of Global Development Operations at United Therapeutics, a biotechnology company located in Research Trial Park, North Carolina. The company focuses on the development and commercialization of unique products to address the unmet medical needs of patients with chronic and life-threatening conditions. Mr. Movahhed manages operational resources in Clinical Trial Management in support of the company's drug development activities across all development phases and for all products. United Therapeutics markets three products for the treatment of pulmonary arterial hypertension and has a strategic objective to conduct insightful clinical trials for medicines under development.

Mr. Movahhed began his pharmaceutical career at Bristol Myers Squibb Laboratories working in the area of Drug Metabolism and Pharmacokinetics and Clinical Research, where he managed clinical trials with anti-infective drugs. After an 11-year tenure with BMS, he moved to California to work for Amgen, a leading biotechnology company. He spent 13 years at Amgen and had progressive positions leading to Sr. Director and Head of US Development Operations where he managed a large team involved in all aspects of clinical trials management. During his tenure at Amgen, Mr. Movahhed honed his leadership skills in Drug Development to make the conduct clinical trials predictable through effective planning, operational feasibility, investigator and CRO relationships, and metrics to manage operational performance. After Amgen, Mr. Movahhed held similar management positions with several small biotech companies before joining United Therapeutics in July 2010.

Mr. Movahhed obtained BS and MS degrees in Biological Sciences from the University of Michigan, Ann Arbor, Michigan.

## Kelly Otto, MS

Kelly Otto is currently a clinical development consultant assisting industry and non-profit groups in all stages of clinical drug development. She holds a MS in Statistics and has over 20 years experience in clinical trials and drug development. She has been responsible for CRO selection and management in many companies. Kelly Otto was formerly Vice President of Clinical Development Operations at Corus Pharma where her responsibilities included representing the company to the FDA in pre-NDA negotiations and presenting and discussing strategy and progress to the Board of Directors and Venture Capitalists. She has also served as a Director of Biostatistics, Data Management, and Quality Control groups. Kelly Otto has represented companies in numerous FDA meetings and negotiations. She has experience with several electronic data management systems including selection, setup, reporting and form and edit check design. She has frequently authored, reviewed, and edited study documents, SOPs, manuscripts, abstracts and regulatory documents.